National Transportation Safety Board NTSB ID: DEN02TA052 Aircraft Registration Number: N123Z FACTUAL REPORT Occurrence Date: 06/09/2002 Most Critical Injury: None ÁVIATION Occurrence Type: Accident Investigated By: NTSB ETYBO Location/Time Nearest City/Place State Zip Code Local Time Time Zone CO 81501 2030 MDT **Grand Junction** Distance From Landing Facility: 10 Direction From Airport: 45 Airport Proximity: Off Airport/Airstrip Aircraft Information Summary Aircraft Manufacturer Model/Series Type of Aircraft Beech 58P Airplane

Air Medical Transport Flight: No

Narrative

Sightseeing Flight: No

Brief narrative statement of facts, conditions and circumstances pertinent to the accident/incident:

On June 9, 2002, approximately 2030 mountain daylight time, a Beech 58P, N123Z, operated by the U. S. Department of Agriculture (USDA) Forest Service and piloted by an airline transport pilot, was substantially damaged when it encountered severe turbulence, approximately 10 miles east of Grand Junction, Colorado. Visual meteorological conditions prevailed at the time of the accident. The aerial observation flight was conducted in support of wildfire fighting efforts near Glenwood Springs, Colorado, as public use under the provisions of Title 14 CFR Part 91. No flight plan was on file. The pilot reported no injuries. The local flight originated at Grand Junction-Walker Field (GJT), Grand Junction, Colorado, about 1715, and was returning to GJT when the accident occurred.

According to the USDA Safety Manager, the pilot departed GJT on fire assignment as a Forest Service lead airplane, to the Coal Seam Fire in Garfield County, Colorado, in the vicinity of Glenwood Springs. The airplane was operating by request of, and under the control of the Garfield County Sheriffs Department. The pilot reported experiencing low-level wind shear and light, moderate, and severe turbulence from just after takeoff through arriving at the area of operation. Following a reconnaissance of the fire, the pilot reported climbing to approximately 5,000 feet agl (above ground level) to avoid the turbulence and wait for wind conditions to improve so that tanker operations (aircraft dropping fire suppressant chemicals on the wildfire) could begin. The pilot reported that wind conditions improved and tanker operations commenced. On conclusion of the tanker operations, the pilot returned to GJT.

The pilot reported he was in the vicinity of the Book Cliffs, approximately 10 miles northeast of GJT, approximately 2,000 feet agl in a low power descent, and an airspeed of approximately 150-160 knots, when he encountered one significant event of severe turbulence. The pilot reported the winds were out of the southwest at 20 knots with gusts to 29 knots. The airplane continued to GJT and landed uneventfully. The aircraft damage was noted the following morning during a routine preflight inspection.

An examination of the airplane showed the top skin of the airplane's left wing, between the fuselage and the left engine nacelle, was buckled. Flight control continuity was confirmed. An examination of the engines, engines controls, and other airplane systems revealed no anomalies.

At 1956, the Aviation Routine Weather Report for GJT was clear skies, visibility 9 statute miles, temperature 91 degrees Fahrenheit (F), dew point 14 degrees F, winds 180 degrees at 20 knots with gusts to 28 knots, and an altimeter setting of 29.55 inches of Mercury. At 2056, the winds at GJT were reported as 170 degrees at 16 knots with gusts to 24 knots.

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AVIATION			00,00,2002									
			Occurrence Type: Accident									
Landing Facility/Approach Inf	ormation											
Airport Name	Airport ID:	Airport Eleva	tion	Run	way Used	Runwa	vay Length		Runv	way Width		
WALKER FIELD	GJT	4858 Ft	. MSL	29	1050		1		150			
Runway Surface Type: Asphalt												
Runway Surface Condition: Dry												
Type Instrument Approach: NONE												
VFR Approach/Landing: Full Stop; Straight-in												
Aircraft Information												
Aircraft Manufacturer Beech			Model 58P	/Series					Serial TJ-2	Numbe 11	r	
Airworthiness Certificate(s): Normal												
Landing Gear Type: Retractable - Tricycle												
Homebuilt Aircraft? No	Homebuilt Aircraft? No Number of Seats: 5						5400	5400 LBS Number		er of Engines: 2		∶ 2
Engine Type: Reciprocating	-	Engine Manufacturer: Model/Series: TSIO-520-WB						Rated Power: 325 HP				
- Aircraft Inspection Information												
Type of Last Inspection			Date of Last Inspection Time Sir			nce Last Inspection			Airfran	ne To	tal Time	
AAIP				Ho					ours Hours			
- Emergency Locator Transmitter (I	ELT) Information											
ELT Installed? Yes	ELT Operate	ed? No		ELT Aided in Locating Accident Site? No								
Owner/Operator Information												
Registered Aircraft Owner			Street Address 3833 S. Development Avenue									
USDA Forest Service			City							State	е	Zip Code 83705
			Street Address									
Operator of Aircraft			Same as Reg'd Aircraft Owner							Ctot		Zin Cada
Same as Reg'd Aircraft Owner	City							State	Э	Zip Code		
Operator Does Business As: U. S. Forest Service Operator Designator Code:												
- Type of U.S. Certificate(s) Held: N	lone											
Air Carrier Operating Certificate(s):												
Operating Certificate: Operator Certificate:												
Regulation Flight Conducted Under	: Public Use											
Type of Flight Operation Conducted	: Aerial Observat	tion										
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AVIATION				Occurrence Type: Accident										
First Pilot Information														
Name					City		;	State	Date	of Birth	Age			
On File			On File	n File On File Or						44				
Sex: M	Seat Occupied	Left	n Pilot	ilot Certificate Number: On File										
Certificate(s): Airline Transport; Flight Instructor; Commercial; Military														
Airplane R	ating(s): Multi	i-engine Lar	nd; Single-e	ngine Land										
Rotorcraft/Glider/LTA: Glider														
Instrument Rating(s): Airplane														
Instructor Rating(s): Airplane Multi-engine; Airplane Single-engine														
Type Rating/Endorsement for Accident/Incident Aircraft? No Current Biennial Flight Review? 10/2001														
Medical Ce	ert.: Class 2	Medica	al Cert. Statu	s: Valid Me	dicalno wa	ivers/lim.		Da	te of Last	Medical	Exam:	: 06/2001		
- Flight Tin	ne Matrix	All A/C	All A/C This Make Airplane and Model Single Engine		Airplane Mult-Engine	Night	Night Actual		Simulated	Rotorcraft		Glider	Lighter Than Air	
Total Time		5484	1880	947	4537	57	0 5	570			38	100		
Pilot In Command(PIC)		4250	1690	890	2590	57	570 570		247			60		
Instructor		702	352	250	452		180							
Last 90 Days		79	70	79			5 10							
Last 30 Days		41	41		41		2	3						
Last 24 Ho	urs	5	5		5					<u> </u>				
Seatbelt Us	sed? Yes	Shou	lder Harness	Used? Yes		Тох	Toxicology Performed? No Second Pilot? No							
Eliaht Dia	ın/Itinerary													
	ght Plan Filed: Co	ompany VE												
Departure		onipany vi				Sta	ate	Airport I	dentifier	er Departure Time			Time Zone	
Grand Ju						cc		GJT		1715			MDT	
Destination	1					Sta	ate	Airport Ide						
Local Flig	jht													
Type of Clearance: VFR														
Type of Air	space: Class	E												
Weather	Information													
Source of	Briefing: Unkno	wn												
Method of	Briefing: Unkno	wn												
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	Occurrent	Occurrence Type: Accident													
Weather Information															
WOF ID	Observation Time	Time Zone	WOF Elevati	OF Elevation WOF Distance From Accid				dent Site Direction From Accide)			
GJT	1956	MDT	4858 Ft.	MSL				10 NM 2			225 Deg.	Mag.			
Sky/Lowes	st Cloud Condition: Clea	ar		Ft. AGL Co					Condition of Light: Day						
Lowest Ce	iling: None	Ft.	AGL	Visib	Visibility: 9 SM				meter:	29.55	"Hg				
Temperatu	-10 °C	Wind	Direction:	180			Dei	nsity Altitude:	8478	Ft.					
Wind Spee	ed: 20	Gusts: 28		Weather Condtions at Accident Site: Visual Conditions											
Visibility (F	RVR): Ft	. Visibility (R	VV)	SM	Intensity	of Precip	itation:								
Restrictions to Visibility: None															
Type of Pro	ecipitation: None														
Accident	Information														
Aircraft Dai	mage: Substantial		Aircraft Fir	Aircraft Fire: None					Aircraft Explosion None						
Classificati	ion: U.S. Registered/l	J.S. Soil													
- Injury Su	mmary Matrix	Fatal Se	rious Mino	or	None	TOTAL									
First Pi	ilot				1		1								
Second	d Pilot														
Studen	nt Pilot						7								
Flight I	nstructor						7								
Check	Pilot						7								
Flight E	Engineer						7								
Cabin A	Attendants						7								
Other C	Crew						7								
Passer	ngers														
- TOTAL A	ABOARD -				1		1								
Other 0	Ground						7								
- GRANE	O TOTAL -				1		1								
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Investigator-In-Charge (IIC)

David C. Bowling

Additional Persons Participating in This Accident/Incident Investigation:

Robert D Lesitsky Air Safety Inspector Federal Aviation Administration Salt Lake City, UT 84116